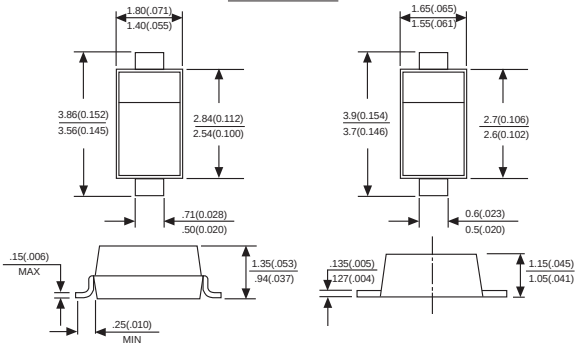




1N4448W

FAST SWITCHING DIODE

SOD-123



Dimensions in millimeters and (inches)

FEATURES

- ◆ Fast switching speed
- ◆ Surface mount package ideally suited for automatic insertion
- ◆ For general purpose switching applications
- ◆ High conductance

MECHANICAL DATA

Case: Molded plastic body

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbols marked on case

Marking: T5

Maximum ratings and electrical characteristics, Single diode @T_A=25°C

PARAMETER	SYMBOLS	Limits	UNITS
Peak repetitive peak reverse voltage	V _{RRM}	75	V
Working peak reverse voltage	V _{RWM}		
DC Blocking voltage	V _R		
RMS Reverse voltage	V _{R(RMS)}	53	V
Forward continuous current	I _{FM}	500	mA
Average rectified output current	I _O	250	mA
Peak forward surge current @=1.0μs	I _{FSM}	4.0	A
@=1.0s		2.0	
Power dissipation	P _d	400	mW
Thermal resistance junction to ambient	R _{θJA}	315	K/W
Storage temperature	T _{STG}	-65 to +150	°C
Non-Repetitive peak reverse voltage	V _{RM}	100	V

Electrical ratings @T_A=25°C

PARAMETER	SYMBOLS	Min.	Typ.	Max.	Unit	Conditions
Reverse brdakdown voltage	V _{(BR)R}	75			V	I _R =10μA
Forward voltage	V _{F1}	0.62		0.72	V	I _F =5mA
	V _{F2}			0.855	V	I _F =10mA
	V _{F3}			1.0	V	I _F =100mA
	V _{F4}			1.25	V	I _F =150mA
Reverse current	I _{R1}			2.5	μA	V _R =75V
	I _{R2}			25	nA	V _R =20V
Capacitance between terminals	C _T			4	pF	V _R =0V, f=1.0MHz
Reverse recovery time	t _{rr}			4	ns	I _F =I _R =10mA I _{rr} =0.1X I _R , R _L =100Ω

MDD ELECTRONIC

RATINGS AND CHARACTERISTIC CURVES 1N4448W

FIG. 1- POWER DERATING CURVE

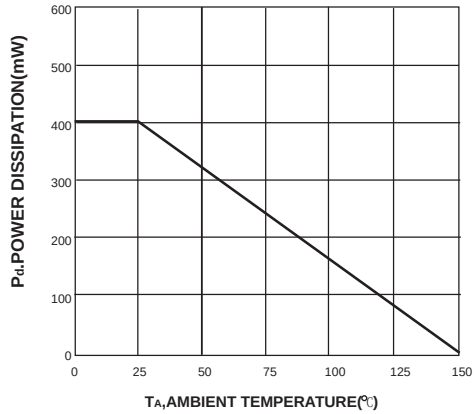


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

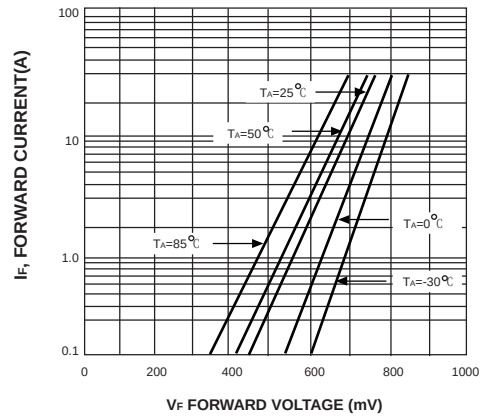


FIG. 3- TYPICAL REVERSE CHARACTERISTICS

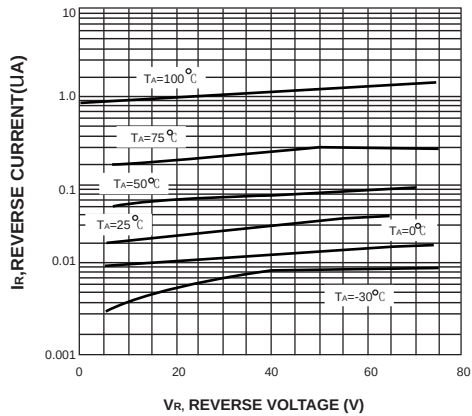


FIG. 4- REVERSE RECOVERY TIME VS FORWARD CURRENT

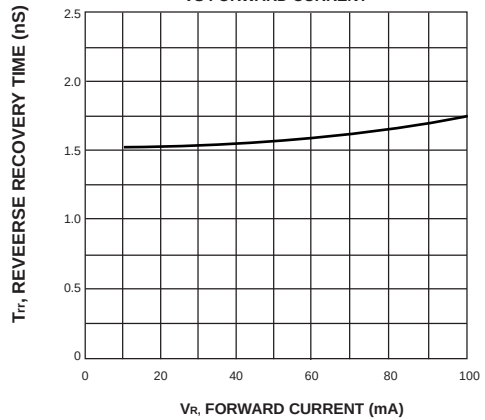


FIG. 5- TOTAL CAPACITANCE VS REVERSE VOLTAGE

